

### COMPRESSOR DEFINITION

Designation	T 6215Z
Nominal Voltage/Frequency	200-240 V 50 Hz / 230 V 60 Hz
Engineering Number	206ZN11

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	200-240 / 50	[ V / Hz ]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°F to 50°F)	
5 Motor type	CSIR		
6 Starting torque	HST - High starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	16.2	[kgf/cm <sup>2</sup> ] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20.6	[kgf/cm <sup>2</sup> ] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	20.44	[cm <sup>3</sup> ] (1.247 cu.in)
2.1 Bore [mm]	36.990	
2.2 Stroke [mm]	19.030	
3 Lubricant charge	550	[ml] (18.60 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	16.88	[kg] (37.21 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	200-240 V 50 Hz / 230 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRP-0072	
3 Start capacitor	64-77(330)	[μF(VAC minimum)]
4 Run capacitor	-	[μF(VAC minimum)]
5 Motor protection	T0590/20	
6 Start winding resistance	9.00	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.30	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	30.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	5.00	[A] - Measured according to UL 984
11 Approval boards certification	IMQ - UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @230V60Hz			ASHRAEHBP46 Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°F) 54.4°C (129.92°F)	
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
7100	1789	2080	950	5.67	46.03	7.47	1.88	2.19

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V50Hz			ASHRAE46 Fan		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	2719	685	797	468	4.09	14.71	5.80	1.46	1.70
-10	(+14)	3492	880	1023	518	4.16	18.95	6.76	1.70	1.98
-5	(+23)	4520	1139	1325	569	4.32	24.61	7.96	2.00	2.33
0	(+32)	5804	1463	1701	621	4.56	31.75	9.35	2.36	2.74
+5	(+41)	7344	1851	2152	674	4.89	40.40	10.89	2.74	3.19
+10	(+50)	9139	2303	2678	729	5.29	50.60	12.54	3.16	3.67

TEST CONDITIONS: @230V50Hz			ASHRAE46 Fan		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	2333	588	683	468	4.02	13.61	5.00	1.26	1.46
-10	(+14)	3060	771	897	531	4.21	17.95	5.76	1.45	1.69
-5	(+23)	3989	1005	1169	595	4.46	23.50	6.69	1.69	1.96
0	(+32)	5121	1290	1500	661	4.77	30.31	7.73	1.95	2.27
+5	(+41)	6455	1627	1891	730	5.13	38.42	8.85	2.23	2.59
+10	(+50)	7991	2014	2341	801	5.54	47.86	9.99	2.52	2.93

TEST CONDITIONS: @230V50Hz			ASHRAE46 Fan		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	1934	487	567	469	3.94	12.33	4.13	1.04	1.21
-10	(+14)	2609	657	764	544	4.26	16.68	4.79	1.21	1.40
-5	(+23)	3433	865	1006	621	4.61	22.04	5.52	1.39	1.62
0	(+32)	4406	1110	1291	702	4.98	28.45	6.29	1.59	1.84
+5	(+41)	5528	1393	1620	786	5.38	35.93	7.05	1.78	2.07
+10	(+50)	6799	1713	1992	873	5.80	44.54	7.77	1.96	2.28

### E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 35°C (+95°F))					
@230V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	3181	802	932	547	4.17	17.21	5.80	1.46	1.70
-10	(+14)	4085	1030	1197	606	4.25	22.17	6.76	1.70	1.98
-5	(+23)	5289	1333	1550	666	4.41	28.80	7.96	2.00	2.33
0	(+32)	6791	1711	1990	726	4.65	37.15	9.35	2.36	2.74
+5	(+41)	8592	2165	2518	789	4.98	47.27	10.89	2.74	3.19
+10	(+50)	10693	2695	3133	853	5.40	59.21	12.54	3.16	3.67

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@230V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	2729	688	800	547	4.10	15.92	5.00	1.26	1.47
-10	(+14)	3580	902	1049	621	4.30	21.00	5.77	1.45	1.69
-5	(+23)	4667	1176	1367	696	4.55	27.49	6.69	1.69	1.96
0	(+32)	5991	1510	1755	773	4.86	35.46	7.73	1.95	2.27
+5	(+41)	7552	1903	2213	854	5.23	44.95	8.85	2.23	2.59
+10	(+50)	9350	2356	2740	937	5.65	56.00	9.99	2.52	2.93

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@230V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	2262	570	663	548	4.02	14.42	4.14	1.04	1.21
-10	(+14)	3052	769	894	636	4.35	19.52	4.79	1.21	1.40
-5	(+23)	4016	1012	1177	726	4.70	25.79	5.52	1.39	1.62
0	(+32)	5154	1299	1510	820	5.08	33.28	6.29	1.59	1.84
+5	(+41)	6467	1630	1895	919	5.48	42.04	7.06	1.78	2.07
+10	(+50)	7955	2005	2331	1021	5.91	52.11	7.77	1.96	2.28

### F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	9.6 +0.07/+0.00	[mm]	(0.378" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	9.6 +0.07/+0.00	[mm]	(0.378" +0.003"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		